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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,411	03/24/2004	Frank Muir	08740001AA	3860
30743 7590 09/11/2008 WHITHAM, CURTIS & CHRISTOFFERSON & COOK, P.C. 11491 SUNSET HILLS ROAD SUITE 340 RESTON, VA 20190				
EXAMINER DANIELS, MATTHEW J				
ART UNIT		PAPER NUMBER		
1791				
MAIL DATE		DELIVERY MODE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/807,411

Applicant(s)

MUIR, FRANK

Examiner

MATTHEW J. DANIELS

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,7-11,17 and 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,7-11,17 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Prosecution Reopened

1. A decision on appeal was mailed 13 August 2008 in which the rejection of Claim 4 under 35 USC 103(a) was reversed. Claim 1 was subsequently amended on 14 August 2008 to make it commensurate with the scope of previous Claim 4.
2. Prosecution on the merits of this application is reopened on claims 1, 2, 7-11, 17, and 18 considered unpatentable for the reasons indicated below:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 7, 8, 9, 10, 11, 17, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owens (US 2,635,289) in view of Mitchell (US 2,427,870).

The Examiner submits that Owens' annular shape is suitable for engaging a bottle alone or in combination with Mitchell, and therefore meets all intended use limitations drawn to engaging of bottles or serving as a bottle cap. **As to Claim 1**, Owens teaches: A method of making a bottle cap with a built-in magnification feature (Figs. 20-30), comprising the steps of selecting a radius of curvature (inherent in that a radius is provided), pressing a single piece of plastic (Figs. 62, 63, see "a plastic sheet" at 3:26) into the shape of a bottle cap having a top

portion (Fig. 30, Items 284,281) and an annular bottle engaging portion (Fig. 30, Items 286,285) which includes a mounting member for selectively affixing the lens to an object, wherein said at least one of said upper or lower convex surfaces of each bottle cap has a radius of curvature (many of the elements of Owens would have a radius so as to magnify, see the figures) so as to provide optical magnification of objects through said top portion.

Owens does not explicitly disclose (a) different radii being selected, and (b) the use of a lid wall with an inwardly projecting hook region at its base for selectively fixing the article to another object. However, these aspects of the invention would have been prima facie obvious for the following reasons:

(a) Owens clearly instructs the ordinary artisan to provide a “size and shape wanted in the finished element” at 32:30-31. The process is applied to various optical instruments including telescopes, magnifying glasses, etc. (3:7-11, 3:50-53, 6:23-32, and Fig. 58). In view of the Owens references, it would have been obvious to provide lenses having different radii of curvature in order to provide various magnifications and articles having various different sizes.

(b) Owens recognizes that the structure must be mounted using some mounting structure (Figs. 25, 26, 29, 30, 30A, etc.) but is silent to the particular claimed mounting structure. However, Mitchell teaches the use of a lid wall with an inwardly projecting hook region (Figs. 3 and 4, item 21) for use with a lens which is mounted as a cover. Mitchell suggests that various sizes may be provided, from a hand operated size to one of such substantial size as to make hand operation inconvenient (3:29-35).

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Mitchell into that of Owens for the following reasons:

(a) Owens provides a process for fabricating lenses from “Lucite” or other methacrylate resins with various mounting features (6:35-39 and Figs. 20-30A), many of which provide the lens mounts to be placed on or over the support structure (Fig. 26, item 246, Fig. 24, item 237, Fig. 30A, item 290). Mitchell provides lenses made from methacrylate resins such as “Lucite” with a mounting means (Fig. 3, item 21). In view of the similar materials of the Owens and Mitchell lenses and the requirement in each reference that a mounting feature be provided, the ordinary artisan would have found it obvious to perform a simple substitution of the Owens mount for the hook shaped channel disclosed by Mitchell since both are recognized in the art as known mounting features for lens structures.

(b) Owens provides a process for fabricating lenses from “Lucite” or other methacrylate resins with various mounting features (6:35-39 and Figs. 20-30A), thereby suggesting that some mounting feature is desirable. Mitchell provides lenses made from methacrylate resins such as “Lucite” with a mounting means (Fig. 3, item 21). Since Mitchell teaches the channel or hook shape as desirable for mounting this type of lens, one of ordinary skill in the art at the time of the invention would have been motivated to incorporate the Mitchell mount into the Owens method in view of Owens’s suggestion to use a mount and in view of the mount provided by Mitchell.

As to Claim 2, Owens teaches the pressing step is achieved using a stamping machine (Figs. 1 and 2). **As to Claim 7**, by the multitude of elements shown in the figures of Owens, it is asserted that Owens clearly recognizes the particular radii of curvature to be a result-effective variable which can be modified and optimized. Additionally, Owens teaches that the upper and lower surfaces are convex and have an equal radius of curvature (Figs. 25 and 40, for instance). **As to Claim 9**, Owens teaches a flat surface and a convex surface (Fig. 20). Although silent to the top

and bottom surfaces, this is a matter of orientation, and Owens' Fig. 20 meets the claimed limitation. **As to Claims 10 and 11**, Owens teaches plastic as an optical lens, which would have inherently have been transparent and translucent (Title, 4:14, 11:69-12:33). These terms appear to overlap in scope. **As to Claim 17**, Mitchell provides an upper convex surface which has a perimeter that extends to an edge of the engaging portion (lens extends over mount, 21). One would have been motivated to incorporate the extending lens of Mitchell into that of Owen in order to increase the field of view by mounting to the outside of a tube. **As to Claim 18**, Owens' process is simultaneous, and forms one or two convex surfaces (see the figures).

4. **Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Owens (USPN 2635289) in view of Mitchell (US 2,427,870), and further in view of Harris (USPN 4401434). Owens and Mitchell teach the subject matter of Claim 1 above under 35 USC 103(a).**

As to Claim 17, Owens appear to be silent to the particular configuration, however, the Examiner takes the position that Harris provides a lens having convex surfaces and a perimeter which extends to an edge of the annular bottle engaging portion (Fig. 5, items 64, 28, and 12). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Harris into that of Owens in order to provide a kit which is easy to manufacture and market (2:12-14), adapted for easy storage and maintenance of all the components needed in a single location (2:1-11), maintaining the viewer in a convenient position (2:29-40), and providing the largest possible magnifier in the lid to maximize the effect of the invention.

Response to Arguments

5. Applicant's arguments with respect to Claim 4, now incorporated in Claim 1, have been considered, but are moot in view of the new ground(s) of rejection.
6. The dispositive question on page 9 of the decision by the Board of Patent Appeals and Interferences mailed 13 August 2008 was whether one of ordinary skill would have looked to the disclosure of Towns to improve the mounting device for optical instruments taught by Owens. The Board determined that there was no demonstration that one of ordinary skill in the art would have looked to soda bottle cap features to improve mounting devices for optical instruments.
7. To the extent that the Towns reference was found to be outside of the field of Applicant's endeavor, Mitchell provides a mounting structure for mounting an optical instrument (a lens) formed from the same material as that disclosed by Owens.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW J. DANIELS whose telephone number is (571)272-2450. The examiner can normally be reached on Monday - Friday, 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew J. Daniels/
Primary Examiner, Art Unit 1791
9/9/08

/Gregory L Mills/
Supervisory Patent Examiner, Art Unit 1700
Reopening after BPAI decision approved